

Abstract of the Disclosure

An extruded wood-plastic profile. The profile includes: a wood component; a plastic component, the wood component and the plastic component being intermixed to form the profile body. A bonding agent is added for improving the adherence between the wood component and the plastic component. In the preferred embodiment, the bonding agent includes a thermoplastic component and at least one bonding site. In the preferred embodiment, the bonding agent thermoplastic component is a polyethylene and the bonding agent has a melt index value greater than the melt index value of the plastic component of the profile. In the preferred embodiment, the bonding site preferably is an anhydride, such as a carboxylic acid anhydride, such as maleic anhydride. The wood-plastic composite of the present invention has a modulus of rupture of greater than about 1200 psi when tested according to ASTM D4761, and in the preferred embodiment, the modulus of rupture is greater than about 2500 psi.

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